JOURNAL

OF THE

ASIATIC SOCIETY.

As-Soyúti's work on Earthquakes, called كشف الصلصلة عن Kashf as-Salsalah 'an wasf Az-zal-zalah, i. e. removing the noise from the description of the Earthquakes, (or clearing up the description of Earthquakes.) Translated from the Arabic by A. Sprenger, Esq. B. M. S.

Jelal-ed-din as-Soyútí, an Egyptian polygrapher of some merit, died in A. H. 911. He wrote this work on the occasion of an earthquake in Egypt, with a view of showing to his countrymen by a number of traditions which have been omitted in this translation, that earthquakes are ordained by God to punish men for their sins. At the same time the author wished to console them by showing them from history, that much more frightful punishments of this kind had taken place than the one under which they suffered in his time. This translation has been made from an Arabic MS. of the Royal Library at Paris, (fonds Asselin N. 218) which is neither very correct nor legible. A better copy is preserved in the library at Gotha. This translation, was not made with the view that it should ever be published, but it was merely intended as a sort of a hasty memorandum for the translator, it will therefore probably not stand the criticism of the philologist, though the student of Natural Philosophy may rely, that the facts are in general correctly rendered into English.—A. S.

It would appear that this is the original of the Persian work known amongst the native literati of the Western Provinces, by the name of 'Zelzele Namah,' for which enquiry was made sometime agoby Lieut. Baird Smith. See Proceedings of Nov. 1842, Vol. xi, p. 1201. Upon our mentioning it to Dr. Sprenger, he expressed this opinion, and has been kind enough to place this curious little Treatise at our disposal for the Journal.—Eds.

A. H. 94. On the 20th of Adar (March) an earthquake in Syria, which lasted forty days. Many buildings were destroyed in Antiochia.

98. Again for forty days, during the Khalifat of Omar Ben Abdulaziz, in Syria.

1843.]

- 130. There was an earthquake at Damascus, which was so violent, that the people were obliged to leave the town.
 - 131. Several new shocks in Damascus.
- 180. In Egypt a very violent earthquake. The minaret of Alexandria was destroyed.
 - 187. At Masisa الميصة an earthquake and an inundation.
- 203. In Khorasan an earthquake which lasted seventy days; the mosque of Balkh and the fourth part of the town were destroyed.
 - 219. Great darkness from noon until the evening.
- 220. Antiochia was destroyed by an earthquake, which lasted forty days.
 - 224. An earthquake at Fergana, by which 15,000 persons perished.
- 225. An earthquake at Ahwaz for sixteen days; it was also felt in Jebal.
- 233. At Damascus many persons were buried under their houses; the earthquake extended to Antiochia, Mesopotamia, and Mausil. It is supposed that 50,000 persons perished.
- 232. Several earthquakes, more particularly in the Maghrib and in Syria, where the walls of Damascus and Emessa were destroyed. It was felt at Antiochia and El-Awassim العواصم in Mesopotamia and Mausil.
- 233. On Thursday, the 11th of Rabi-al-Akhar, many buildings were destroyed at Damascus by an earthquake.
- 234. At Herat, the houses were destroyed.
 - 239. At Tiberias.
 - 240. In the Maghrib, thirteen villages of Kairowan sunk.
- 242. In Shaban a very violent earthquake. At Tunis about 45,000 persons were buried under their houses; it extended also over Yemen, Khorasan, Fars, Syria, Bastam, بسطام Komm تع Kashan, تالدارمغان Rai, الدارمغان Rai, الدارمغان Rai, الدارمغان Rai, الدارمغان تع المعالمة الم
- 245. Earthquakes prevailed over the whole earth, and many towns and bridges were destroyed.

At Antiochia a mountain fell into the sea, with 1005 houses. It had been covered with about ninety villages. The river disappeared one farsang's distance. Dreadful noises were heard at Tinnis.

In Mecca all the springs disappeared. The earthquake extended over Rakka, Harran, Ras el-'Ain, Emessa, Damascus, Rokha, Tarsus, Massissa and Adina. On the shores of Syria, in Laodicea, mountains moved with their inhabitants, and when it had destroyed the Euphrates, and was felt in Khorassan.

- 249. In Dhul Hajj was a very violent earthquake, at Rai the houses fell down, and the people took flight into the fields.
- 258. At Wasit about 20,000 persons were buried under their houses, by an earthquake.
- 268. At Bagdad an earthquake, followed by torrents of rain and a thunder-storm.
- 280. At Ardebil six earthquakes took place in the course of this year; 100,000 persons died under the ruins of their houses. One of these earthquakes was preceded by an eclipse of the moon, darkness and wind.
 - 288. An earthquake which lasted for some days.
 - 289. In Rejeb at Bagdad, it lasted for some days.

On the day of Arafat which fell in summer, the wind was so cold, that the people were obliged to dress in furs.

- 300. A mountain split at Dinawar, and streams of water gushed out from it, which submerged many villages. A star split into three pieces, and this was followed by a frightful noise.
- 331. At Nesa many buildings tumbled down, and many people perished.
- 344. An earthquake in Egypt; it lasted three hours, and did great damage.
- 345. An earthquake at Hamadan, many lives were lost.
- 346. An earthquake at Rai and about that town, it lasted 40 days, then it discontinued for sometime, but it again returned. It extended to Talikán, and there sunk 150 villages belonging to Rai. At Rai a mountain sunk, and an enormous chasm opened from which water and smoke gushed out.
- 347. An earthquake at Komm, Holwan, Kaman and Jebal, many people perished; at the same time Bagdad suffered from an earthquake.

1843.]

Juring the reign of Kafur the Akhshidian, repeated shocks of earthquakes visited Egypt within the space of six months.

362. Several castles in Syria were ruined by an earthquake.

363. At Wasit.

376. Many persons perished under the ruins caused by an earthquake.

393. In Syria, Abasim, and the Greek frontier, many castles were ruined by an earthquake.

398. In Shaban at Dinawar 10,000 persons perished under the ruins, besides those swallowed up by the ground. An inundation took place at Shiraz, and many ships were wrecked at sea.

During the reign of El-Hakim El-Obeidi, who ruled from 386 to 411 in Egypt, several earthquakes took place.

425. Many earthquakes took place in Egypt and Syria, by which one-third of Ramlah was destroyed. The walls of Jerusalem fell down, and many villages were swallowed up by the ground.

434. At Tebris, the fortress and the town were nearly destroyed by an earthquake, and about 40,000 persons perished. Many also perished at Tadmor and Balbek by the same cause.

438. Khelat and Diarbekr.

444. An earthquake in Ahwaz, by which much destruction was caused.

450. In the month of Shaban an earthquake at Bagdad, which extended to Hamadan and Tekrit.

455. Sha'ban; at Wasit, Antiochia, Laodicea, Sul, Akka and over all Syria. The walls of Tripolis were destroyed.

458. Jomadal Akhr in Khorassan, mountains were split, and many villages sunk under the inhabitants; some saved themselves by taking refuge in the open fields. Soyuti gives a copy of the document which was sent to Bagdad on this occasion. The earthquake is thus described:--" It caused the mountains to split; it cleft hills, overturned towns together with their inhabitants, and it levelled them with the ground in such a way that but few people escaped. Most buildings lay in ruins, and it is impossible to ascertain the number of those who

تصدءت منها الجبال وتشققت منها التلال وانقلبت القرى باهلها واستوصلت ص اصلها ولم يسلم ص ساكنها الا القليل و خرب اكثر بنيان البلد وهلك خلق لا ياتي عليهم العدد

460. Tuesday 11th Jomadalawwal, an earthquake in Palestine: Ramla was destroyed. It extended to the Hejaz. It reached also Wadi El-Szafr, Khaiber, Bedr, Yanba, Wadi-kora, Teima and Tabuk, and it extended as far as Kufa; only two houses of Ramla remained, 25,000 persons perished. 'Aila was destroyed with all its inhabitants, the earthquake was also felt at Jerusalem. The sea receded from the coast, but soon returned again into its place. In all these countries it was felt at the same hour.

462. Tuesday 11th Jomadalawwal at Ramla, and its dependencies, Jerusalem and Egypt. One corner of the principal mosque of Cairo gave way; it was immediately succeeded by two other earthquakes.

464. The earth trembled six times at Bagdad in one earthquake.

478. In Moharrem there was an earthquake at Arjan, under which many Greeks perished.

479. In Irak, in Mesopotamia and in Syria, many buildings were destroyed by an earthquake.

484. In Syria and elsewhere, many buildings, ninety villages, and the walls of Antiochia were destroyed by an earthquake.

508. In Mesopotamia thirteen villages belonging to Roha were destroyed, and part of the walls of Harran; also in Elsun about 100 houses and one-half of the fortress were destroyed.

511. In the days of Arafat were many houses destroyed at Bagdad.

513. The 5th of Ramadan Kazwin was destroyed by an earthquake which returned the following year precisely at the same time.

515. In the Hejaz.

516. At Jannezah part of its wall sunk.

524. Rabi 1st, at Bagdad, many houses were destroyed.

529. At Bagdad several shocks; it began on Thursday the 11th of Shawal and lasted the whole day, amounting to six shocks until Friday night. On the 17th, three shocks took place from midnight till day-break.

532. An earthquake in Syria, Mesopotamia and Irak; many persons were buried under the ruins.

533. At Jannezah 130,000 persons lost their lives. Jannezah sunk, and the spot was covered with black water for the distance of ten farsangs; also Aleppo suffered eighty shocks in one night. It was felt over all the world, but strongest in Aleppo.

「No. 141.

538. On the 14th of Zu-l-ka'de, which fell on a Tuesday, was a great earthquake over all the world.

544. At Bagdad about ten shocks were felt, and a mountain fell near Holwan; the Turkomans suffered greatly.

549. A great fiery wind blew one evening: every body believed that the last day was come; this was succeeded by an earthquake; the water of the Tigris disappeared for a while, but made again its appearance.

550. An earthquake at Bagdad.

552. In Syria, the greater part of Aleppo was destroyed; there suffered also Hamat, Shaizar, Emessa, Hisn al Akrad (the fort of the Kurds,) Laodicea, Antiochia. In Shaizar only one woman and a slave were saved.

In Kafertab not one individual was saved. In Affania the castle was swallowed up, and many towns of the Franks suffered. The walls of several towns of Syria were destroyed; the children perished in the schools, and no one came to ask for them.

551. And the following year several earthquakes took place in Syria.

551. In the night of Rabi 2nd, was a great earthquake. It was preceded and followed by others. In the night of the 25th, at Aleppo, Hamat, and many other places, there were about forty shocks. It was one of the most tremendous earthquakes. On the 29th of the same month, an earthquake took place towards the end of the day, and continued during the night.

The first of Ramazan three shocks.

On the third of the same month three earthquakes; one at noon, the others at midnight.

In the middle of Ramazan there was an earthquake at night, and another in the morning, and two during the following night, and another shock the subsequent day. In the night of the 23d of Ramazan and in the second of Shawal, new shocks of earthquakes were felt which were more violent than the preceding ones, there were also earthquakes on the 7th, 16th and 17th, and in the night of the 22d.

552. In the night of 19th of Safr, a great earthquake took place which was followed by another shock; a third one took place in the night of the 20th, and the following day in Syria. In the night of the 25th Jomada 1st, four shocks. In the night of the 4th of Jomada 2d, several shocks,

particularly at Aleppo and Emessa, where they were destructive; also in Hamat, Kafertab, and Taima. In the 4th of Rajeb at day time at Damascus it was so violent, that never the like had been seen; it caused some destruction. In the night of Friday the 8th of Rajeb there were three earthquakes, which were followed by other earthquakes on Saturday, Sunday and Monday night, and several shocks after that. It did great damage in Hamat, Shiraz, and Emessa. In Damascus it did not begin before Monday the 29th of Rejeb, but caused great consternation. Another earthquake took place on the 24th of Ramazan, which was terribly felt at Aleppo, and Hamat (Apamea,) where it continued for sometime with intermissions. In the night of Saturday the 10th of Shawal and in the night of the 10th of Dilkada, and on the night of the 23d and 25th of the same month, people were so frightened by earthquakes, that they took refuge in the fields. Apamea was destroyed.

565. An earthquake in Syria, Mesopotamia and almost all the world; it destroyed many walls and houses in Syria, more particularly at Damascus, Emessa, Apamea, Aleppo and Balbek.

574. In Armenia and in the country of Irbil.

575. A great earthquake.

592. Great wind over all the world, and an earthquake in Egypt.

593. A large star was split, and a tremendous noise was caused by it, which made the earth tremble. This took place on Friday the 9th of Jomada 2d.

597. In Shawan, there was an earthquake almost over all the world, more particularly in Upper Egypt, where it caused great destruction; it extended over Syria and the sea, Mesopotamia, the Greek Empire and Irak; it was particularly destructive in Syria. It was also felt in Armenia, Azerbijan, and it is calculated that through this earthquake 1,100,000 lives were lost. The first shock lasted but a short time, but after that it continued for several days, and it seems that it came from Mesopotamia to the sea-coast.

578. In Shaban at Emessa, the castle of the Kurds was destroyed; it extended as far as Nablus.

600. An earthquake in Egypt, Mesopotamia, Syria, Mausil, Irak, the Greek Empire and Cyprus; it extended as far as Sabta in the Maghrib.

605. An earthquake at Nishapur, which lasted ten days.

608. In Egypt and Cairo many persons lost their lives, and great smoke arose west of Damascus.

623. On Monday, on the new moon of the latter Jomada, a noise was heard about Medina for two days, which was followed by a great

heard about Medina for two days, which was followed by a great earthquake, which caused great destruction.

657. In Egypt.

661. Mausil.

662. In Egypt.

667. In Sus, by which many castles were destroyed and many lives lost.

692. In the month of Safr at Ramla, Fakul and El-Kerk three villages were destroyed.

693. In Egypt.

702. On the 23d Dhilhajj, Thursday, in Egypt and Syria, many persons were buried under the ruins, and all Alexandria was submerged under the sea.

722. In Mohurrum at Damascus at night.

729. In Rajeb, at Tripolis and in Syria.

744. In Egypt and Syria.

741. On the 4th of Ramazan, two shocks in one hour at Cairo.

775. A slight earthquake at Cairo.

787. On the 13th of Shaban, slight earthquake at Cairo and Egypt.

788. The 18th Jomada 2nd, a slight earthquake.

791. Sufr at Nishapur, violent wind and earthquake; many souls lost.

Nishapur was seven times destroyed by earthquakes, but this time was the worst.

Aleppo and its dependencies suffered from earthquakes on Jomada 2nd, and Shawan and Jomada 1st; and besides that several times in the same year.

809. An earthquake in Antiochia, many lives lost.

811. In Shaban about Aleppo and Tripolis, many lives lost by earth-quakes

and Constantinople. إزنكان

825. At Cairo.828. In Shaban, in Egypt, three shocks in one day.

834. In Shaban, at Granada, and in Spain.

838. In Rabi 2d at Cairo.

841. In Shaban at Cairo, a slight earthquake.

861. At Arzangán, the most part of which was destroyed.

863. At Kerk 100 lives lost by an earthquake.

881. In Egypt a slight earthquake at night.

880. 17th of Mohurrum, at noon, a violent earthquake in Egypt. 888. The 9th of Jomada 1st, on Sunday, a slight earthquake.

889. Rabi 1st, six or more terrible shocks at Aleppo.

896. 12th Jomada 2d, on Sunday, a slight earthquake in Egypt.

905. The night of Friday 27th Dilhajj, a slight earthquake.

A general Statement of the Weather at Kotgurh and Soobathoo, for 1819-20-21. By Captain Patrick Gerard.

Height of the Barometer.

 Inches. Thermometer.

 Maximum, ...
 ...
 23.740
 45°

 Minimum, ...
 ...
 23.445
 31°

 Mean, ...
 ...
 23.592
 38°

 Temperature of the air.
 Temperature of the house.

 Maximum, .. No.
 Maximum, .. 45°

 Minimum only, .. 23° 1′
 Minimum, .. 31°

 Mean, ... No.
 Mean, 38°

Prevailing wind during the month, westerly, but generally very variable.

A general Statement of the Weather at Kotgurh, for February, 1819.

Clear, 11 day Fair, but cloudy and partially cloudy, 8,,

Rainy and stormy, snow and hail, ... 9 ,,